



1645

PATENT

ATTORNEY DOCKET NO.: UCSD1370-5

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Carson and Albani

Art Unit: 1645

Application No.: 09/616,247

Examiner: Shahnan-Shah, K.S.

Filed: July 14, 2000

Title: VACCINE COMPOSITIONS AND METHODS USEFUL IN INDUCING
IMMUNE PROTECTION AGAINST ARTHRITIC PEPTIDES
INVOLVED IN THE PATHOGENESIS OF RHEUMATOID ARTHRITIS

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

RECEIVED

OCT 10 2003

TRANSMITTAL SHEET

TECH CENTER 1600/2900

Transmitted herewith for the above-identified application please find:

1. Information Disclosure Statement (2 pages);
2. Form PTO-1449 (4 pages);
3. Forty One (41) References;
4. Check No. 545478 in the amount of \$180.00; and
5. Return Receipt Postcard.

CERTIFICATION UNDER 37 CFR §1.8

I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date, October 3, 2003, in an envelope addressed to: Commissioner for Patents, P. O. Box 1415, Alexandria, VA 22313-1450.

Deborah Reeves

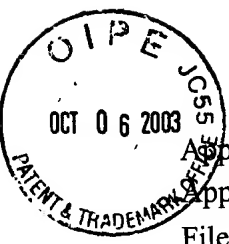
(Name of Person Mailing Paper)

Deborah Reeves

(Signature)

October 3, 2003

(Date)



PATENT
ATTORNEY DOCKET NO.: UCDS1370-5

Applicant(s): Carson and Albani
Application No.: 09/616,247
Filed: July 14, 2000
Page 2

RECEIVED


OCT 10 2003

TECH CENTER 1600/2900

Enclosed is Check No.: 545478 in the amount of \$180.00 to cover the Information Disclosure Statement fee. The Commissioner is authorized to charge any other required fees associated with the filings submitted herewith, or credit any overpayment to Deposit Account No. 50-1355.

Respectfully submitted,

Date: 10/3/03



Kelly Reynolds
Registration No.: 51,154
Telephone: (858) 638-6724
Facsimile: (858) 677-1465

USPTO CUSTOMER NUMBER 28213
GRAY CARY WARE & FREIDENRICH LLP
4365 Executive Drive, Suite 1100
San Diego, CA 92121-2133



PATENT
ATTORNEY DOCKET NO.: UCSD1370-5

RECEIVED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OCT 10 2003

Applicant(s): Carson and Albani

Art Unit: 1645

Application No.: 09/616,247

Examiner: Shahnan-Shah, K.S.

Filed: July 14, 2000

CH CENTER 1600/2900

Title: VACCINE COMPOSITIONS AND METHODS USEFUL IN INDUCING
IMMUNE PROTECTION AGAINST ARTHRITOGENIC PEPTIDES
INVOLVED IN THE PATHOGENESIS OF RHEUMATOID ARTHRITIS

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. § 1.97, enclosed are references relating to the above-identified application. For the convenience of the Examiner, these references are listed on the attached Form PTO-1449 and copies are enclosed herewith.

It is respectfully requested that these references be considered in the examination of this application and their consideration be made of written record in the application file.

10/08/2003 GWORDOF1 00000071 09616247

01 FC:1806

180.00 0P

CERTIFICATION UNDER 37 CFR §1.8

I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date October 3, 2003, in an envelope addressed to: Commissioner for Patents, P. O. Box 4150, Alexandria, VA 22313-1450.

Debbrah Reeves

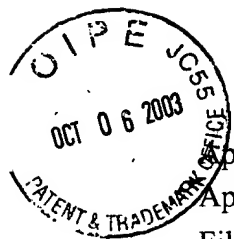
(Name of Person Mailing Paper)

Debbrah Reeves

(Signature)

October 3, 2003

(Date)



Applicant(s): Carson and Albani
Application No.: 09/616,247
Filed: July 14, 2000
Page 2

PATENT
ATTORNEY DOCKET NO.: UCSD1370-5

RECEIVED

OCT 10 2003

TECH CENTER 1600/2900

Enclosed is Check No.: 545478 in the amount of \$180.00 to cover the Information Disclosure Statement fee. The Commissioner is authorized to charge any other required fees associated with the filings submitted herewith, or credit any overpayment to Deposit Account No. 50-1355. A duplicate copy of this Transmittal sheet is enclosed.

Respectfully submitted,

Date: _____

10/3/03



Kelly Reynolds

Registration No.: 51,154

Telephone: (858) 638-6724

Facsimile: (858) 677-1465

USPTO CUSTOMER NUMBER 28213
GRAY CARY WARE & FREIDENRICH LLP
4365 Executive Drive, Suite 1100
San Diego, CA 92121-2133

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Docket No.: UCSD1370-5 (101668-30)	Application No.: 09/616,247
	Applicants: Carson and Albani	
[SUPPLEMENTAL] INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date: July 14, 2000	Group Art Unit: 1645

RECEIVED

OCT 10 2003

TECH CENTER 1600/2900

U.S. PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA	4,654,419	03/31/1987	Vaughan et al.			
	AB	4,683,295	07/28/1987	Carson			
	AC	4,732,757	03/22/1988	Stolle et al.			
	AD	5,116,725	05/26/1992	Vaughan et al.			
	AE	5,310,732	05/10/1994	Carson et al.			
	AF	5,541,164	07/30/1996	Carson et al.			
	AG	5,728,385	03/17/1998	Classen			
	AH	5,773,570	06/30/1988	Carson et al.			
	AI	5,891,435	04/06/1999	Muir et al.			
	AJ	5,992,567	07/13/1999	Au-Young et al.			

FOREIGN PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION (YES/NO)
	AK	WO90/14835	12/13/1990	WIPO			
	AL	WO95/31984	11/30/1995	WIPO			

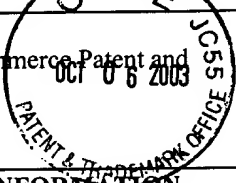
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449

Gray Cary/GT6368012.1
101668-30

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office 	Docket No.: UCSD1370-5 (101668-30)	Application No.: 09/616,247
	Applicants: Carson and Albani	
[SUPPLEMENTAL] INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date: July 14, 2000	Group Art Unit: 1645

RECEIVED
 OCT 10 2003
 TECH CENTER 1600/2900

AM	Albani, S., et al., "Positive Selection in Autoimmunity: Abnormal Immune Responses to a Bacterial dnaJ Antigen Determinant in Patients with Early Rheumatoid Arthritis," <i>Nature Medicine</i> , Vol. 1, No. 5, Pgs. 448-452, 1995
AN	Bonnin, D., et al., "MHC-Derived Peptides Drive Positive T Cell Selection in the Thymus: from a Physiological System to an HLA DRB1*0401 Transgenic Mouse Model for Rheumatoid Arthritis?", <i>Arthritis and Rheumatism</i> , Vol. 39, No. 9 Suppl., Pg. S160, Oct. 1996
AO	Auger, I., et al., "HLA-DR4 and HLA-DR10 Motifs that Carry Susceptibility to Rheumatoid Arthritis Bind 70-kD Heat Shock Proteins," <i>Nature Medicine</i> , Vol. 2, No. 3, Pgs. 306-310, March 1996
AP	Albani, et al., "Genetics and Environmental Factors in the Immune Pathogenesis of Rheumatoid Arthritis," <i>Rheumatic Disease Clinics of North America</i> , 18/4:729-740, 1992.
AQ	Stastney, P., et al., "Immunogenetics of Rheumatoid Arthritis and Juvenile Arthritis", <i>Recenti Progressi in Medicina</i> , Vol. 82, No. 7-8, Pgs. 409-416, 1991
AR	Nepom, G., "Prediction of Susceptibility to Rheumatoid Arthritis by Human Leukocyte Antigen Genotyping" <i>Rheumatic Disease Clinics of North America</i> , Vol. 18, No. 4, Pgs. 785-792, November, 1992
AS	Weyand, C., et al., "The Influence of HLA-DRB1 Genes on Disease Severity in Rheumatoid Arthritis," <i>Annals of Internal Medicine</i> , Vol. 117, No. 10, Pgs. 801-806, November 15, 1992
AT	Fairchild, P., et al., "Peptide-MHC Interaction in Autoimmunity," <i>Current Opinion in Immunology</i> , Vol. 4, pgs. 748-753, 1992
AU	Life, P.F., et al., "Synovial Fluid Antigen-Presenting Cells Unmask Peripheral Blood T Cell Responses to Bacterial Antigens in Inflammatory Arthritis," <i>Clin. Exp. Immunol.</i> Vol. 79, Pgs. 189-194, 1990

EXAMINER	DATE CONSIDERED
----------	-----------------

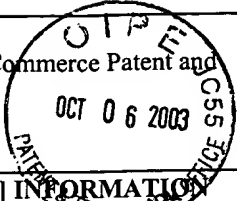
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Docket No.: UCSD1370-5 (101668-30)	Application No.: 09/616,247
[SUPPLEMENTAL] INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Applicants: Carson and Albani	Group Art Unit: 1645
	Filing Date: July 14, 2000	CH CENTER 1600/2900

AV	Van Den Broek, M.F., et al., "Protection Against Streptococcal Cell Wall-Induced Arthritis by Pretreatment with the 65-kD Mycobacterial Heat Shock Protein," <i>J. Exp. Med.</i> , Vol. 170, Pgs. 449-466, August, 1989
AW	Anderton, S.M., et al. "Activation of T Cells Recognizing Self 60-kD Heat Shock Protein Can Protect Against Experimental Arthritis," <i>J. Exp. Med.</i> , Vol. 181, Pgs. 943-952, March 1995
AX	Albani, S., et al., "A Multistep Molecular Mimicry Hypothesis for the Pathogenesis of Rheumatoid Arthritis," <i>Immunology Today</i> , Vol. 17, No. 10, Pgs. 466-470, October, 1996
AY	Anderton et al, "Differential Mycobacterial 65-kDa Heat Shock Protein T Cell Epitope Recognition after Adjuvant Arthritis-Inducing or Protective Immunization Protocols," <i>J. Immunology</i> 152:3656-64, 1994
AZ	Albani et al, "HLA Binding Studies Support a Role for the QKRAA Susceptibility Sequence to Rheumatoid Arthritis (RA) in Positive Selection and Activation of Pathogenic T Lymphocytes," <i>Arthritis and Rheumatism</i> , 38/9 Suppl., Pg. S181, Abstract#173, 1995
BA	Plotkin, S.A., et al., "New Technologies for Making Vaccines," <i>Vaccines</i> , Pgs. 568-575, 1988
BB	Albani, S., et al., "Molecular Basis for the Association Between HLA DR4 and Rheumatoid Arthritis. From the Shared Epitope Hypothesis to a Peptidic Model of Rheumatoid Arthritis," <i>Clin. Biochem.</i> Vol. 25, Pgs. 209-212, 1992
BC	La Cava, A., et al., "The QKRAA Disease Susceptibility Sequence for Rheumatoid Arthritis (RA) is a B Cell Epitope Shared by the Epstein-Barr Virus (EBV) Protein gp110 and the E. Coli Heat Shock Protein dnaJ Possible Implications for Disease Pathogenesis," <i>Arthritis & Rheum.</i> 36(9) Suppl. Pgs. S127 Abstract 1993
BD	Asseldonk, M., et al., "Cloning, Nucleotide Sequence, and Regulatory Analysis of the <i>Lactococcus Lactis</i> dnaJ Gene," <i>Journal of Bacteriology</i> , 175(6), Pgs. 1637-1644, March 1993,

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office 	Docket No.: UCSD1370-5 (101668-30)	Application No.: 09/616,247 RECEIVED OCT 10 2003
[SUPPLEMENTAL] INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Applicants: Carson and Albani Filing Date: July 14, 2000	Group Art Unit: 1645 TECH CENTER 1600/2900

BE	Bardwell, J.C.A., et al., "The Nucleotide Sequence of the <i>Escherichia coli</i> K12 <i>dnaJ</i> + Gene," <i>The Journal of Biological Chemistry</i> , Vol. 261, No. 4, Pgs. 1782-1785, February 5, 1986
BF	Ohki, M., et al., "Nucleotide Sequence of the <i>Escherichia coli</i> <i>dnaJ</i> Gene and Purification of the Gene Product*", <i>The Journal of Biological Chemistry</i> , Vol. 261, No. 4, Pgs. 1778-1781, 1986
BG	Albani, S., et al., "The Susceptibility Sequence to Rheumatoid Arthritis is a Cross-Reactive B Cell Epitope Shared by the <i>Escherichia Coli</i> Heat Shock Protein <i>dnaJ</i> and the Histocompatibility Leukocyte Antigen DRB10401 Molecule," <i>J. Clin. Invest.</i> , Vol. 89, Pgs. 327-331, 1992
BH	van Eden, W., et al., "Cloning of the Mycobacterial Epitope Recognized by T Lymphocytes in Adjuvant Arthritis," <i>Nature</i> , Vol. 331, Pgs. 171-173, January 14, 1988
BI	Silver, P.A., et al. "Eukaryotic DnaJ Homologs and the Specificity of Hsp70 Activity," <i>Cell</i> , Vol. 74, Pgs. 5-6, July 16, 1993
BJ	Zuber et al., "Cloning, Sequencing and Expression of the <i>dnaJ</i> gene of <i>Coxiella Burnetii</i> ," <i>Gene</i> , Vol. 152 Pgs. 99-102, 1995
BK	DeGraeff-Meeder, E.R., et al., "Recognition of Human 60kD Heat Shock Protein by Mononuclear Cells from Patients with Juvenile Chronic Arthritis," <i>The Lancet</i> , Vol. 337, Pgs. 1368-1372, June 8, 1991
BL	Brackertz et al, "OM-8980 in Rheumatoid Arthritis: A 6-Month Double Blind Placebo Controlled Multicenter Study," <i>Journal of Rheumatology</i> , Vol. 16, Pgs. 19-23, 1989
BM	Marsh, S.G.E., et al, "HLA Class II Nucleotide Sequences, 1991," <i>Tissue Antigens</i> , Vol. 37, Pgs. 181-189, 1991
BN	Albani, S., et al., "Immune Responses to the <i>Escherichia Coli</i> <i>dnaJ</i> Heat Shock Protein in Juvenile Rheumatoid Arthritis and their Correlation with Disease Activity," <i>The Journal of Pediatrics</i> , Vol. 124, No. 4, Pgs. 561-565, April 1994
BO	GenCore Accession # HHECDJ

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.